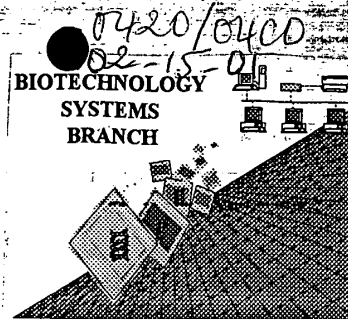


## **RAW SEQUENCE LISTING** **ERROR REPORT**



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/727,030

Source: O/PE

Date Processed by STIC: 12/12/2000

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: [patin30help@uspto.gov](mailto:patin30help@uspto.gov) or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER VERSION 3.0 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

### **Checker Version 3.0**

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:

**<http://www.uspto.gov/web/offices/pac/checker>**

# Raw Sequence Listing Error Summary

## ERROR DETECTED SUGGESTED CORRECTION

SERIAL NUMBER: 09/227,030

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 ☐ Wrapped Nucleics The number/text at the end of each line "wrapped" down to the next line.  
This may occur if your file was retrieved in a word processor after creating it.  
Please adjust your right margin to .3, as this will prevent "wrapping".
- 2 ☐ Wrapped Aminos The amino acid number/text at the end of each line "wrapped" down to the next line.  
This may occur if your file was retrieved in a word processor after creating it.  
Please adjust your right margin to .3, as this will prevent "wrapping".
- 3 ☐ Incorrect Line Length The rules require that a line not exceed 72 characters in length. This includes spaces.
- 4 ☐ Misaligned Amino Acid Numbering The numbering under each 5th amino acid is misaligned. This may be caused by the use of tabs between the numbering. It is recommended to delete any tabs and use spacing between the numbers.
- 5 ☐ Non-ASCII This file was not saved in ASCII (DOS) text, as required by the Sequence Rules.  
Please ensure your subsequent submission is saved in ASCII text so that it can be processed.
- 6 ☐ Variable Length Sequence(s) \_\_\_\_ contain n's or Xaa's which represented more than one residue.  
As per the rules, each n or Xaa can only represent a single residue.  
Please present the maximum number of each residue having variable length and indicate in the (ix) feature section that some may be missing.
- 7 ☐ PatentIn ver. 2.0 "bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequence(s) \_\_\_\_\_. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies primarily to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 8 ☐ Skipped Sequences (OLD RULES) Sequence(s) \_\_\_\_ missing. If intentional, please use the following format for each skipped sequence:  
(2) INFORMATION FOR SEQ ID NO:X:  
(i) SEQUENCE CHARACTERISTICS:(Do not insert any headings under "SEQUENCE CHARACTERISTICS")  
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X:  
This sequence is intentionally skipped  
  
Please also adjust the "(iii) NUMBER OF SEQUENCES:" response to include the skipped sequence(s).
- 9 ☐ Skipped Sequences (NEW RULES) Sequence(s) \_\_\_\_ missing. If intentional, please use the following format for each skipped sequence.  
<210> sequence id number  
<400> sequence id number  
000
- 10 ☐ Use of n's or Xaa's (NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.  
Use of <220> to <223> is MANDATORY if n's or Xaa's are present.  
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 11 ☒ Use of <213>Organism (NEW RULES) Sequence(s) \_\_\_\_ are missing this mandatory field or its response.  
*1-28 (and more)*
- 12 ☒ Use of <220>Feature (NEW RULES) Sequence(s) \_\_\_\_ are missing the <220>Feature and associated headings.  
Use of <220> to <223> is MANDATORY if <213>ORGANISM is "Artificial" or "Unknown"  
Please explain source of genetic material in <220> to <223> section.  
(See "Federal Register," 6/01/98, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of new Rules)
- 13 ☐ PatentIn ver. 2.0 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing).  
Instead, please use "File Manager" or any other means to copy file to floppy disk.

OIPE

## RAW SEQUENCE LISTING

DATE: 12/12/2000

PATENT APPLICATION: US/09/727,030

TIME: 12:10:45

Input Set : A:\240240us.txt

Output Set: N:\CRF3\12122000\I727030.raw

Does Not Comply  
Corrected Diskette Needed

pp 1-5

5 <110> APPLICANT: Patrick N. Gilles  
 6 Patrick J. Dillon  
 7 David J. Wu  
 8 Charles B. Foster  
 9 Stephen J. Chanock  
 12 <120> TITLE OF INVENTION: SINGLE NUCLEOTIDE POLYMORPHIC  
 13 DISCRIMINATION BY ELECTRONIC DOT BLOT ASSAY ON  
 14 SEMICONDUCTOR MICROCHIPS  
 17 <130> FILE REFERENCE: 259/163-US  
 20 <140> CURRENT APPLICATION NUMBER: US/09/727,030  
 20 <141> CURRENT FILING DATE: 2000-11-30  
 20 <150> PRIOR APPLICATION NUMBER: PCT/US00/08617  
 21 <151> PRIOR FILING DATE: 2000-03-28  
 23 <150> PRIOR APPLICATION NUMBER: 60/126,865  
 24 <151> PRIOR FILING DATE: 1999-03-30  
 27 <160> NUMBER OF SEQ ID NOS: 31  
 30 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
 33 <210> SEQ ID NO: 1  
 34 <211> LENGTH: 140  
 35 <212> TYPE: DNA  
 36 <213> ORGANISM: Artificial Sequence  
 W--> 39 <220> FEATURE:  
 W--> 39 <223> OTHER INFORMATION:  
 39 <400> SEQUENCE: 1  
 40 agacctgccc tgcagtgatt gctgtagct ctccaggeat caacggcttc ccaggcaaaag 60  
 41 atgggctgta tggcaccag ggayaaaagg gggaaccagg tacgtgttg getgttctgt 120  
 42 ctctgcaatt ctttacette  
 45 <210> SEQ ID NO: 2  
 46 <211> LENGTH: 25  
 47 <212> TYPE: DNA  
 48 <213> ORGANISM: Artificial Sequence  
 W--> 51 <220> FEATURE:  
 W--> 51 <223> OTHER INFORMATION:  
 51 <400> SEQUENCE: 2  
 52 tgattgcctg tagctctcca ggcatt  
 55 <210> SEQ ID NO: 3  
 56 <211> LENGTH: 28  
 57 <212> TYPE: DNA  
 58 <213> ORGANISM: Artificial Sequence  
 W--> 61 <220> FEATURE:  
 W--> 61 <223> OTHER INFORMATION:  
 61 <400> SEQUENCE: 3  
 62 ggtaaaqaat tgcagagaga cgaacagc  
 65 <210> SEQ ID NO: 4  
 66 <211> LENGTH: 21  
 67 <212> TYPE: DNA  
 68 <213> ORGANISM: Artificial Sequence

global error

These numeric identifiers are  
 MANDATORY whenever the <213>  
 response is Unknown or Artificial Sequence

see item 12 on  
 Error Summary Sheet

RAW SEQUENCE LISTING                      DATE: 12/12/2000  
 PATENT APPLICATION: US/09/727,030                      TIME: 12:10:45

Input Set : A:\240240us.txt  
 Output Set: N:\CRF3\12122000\I727030.raw

```

W--> 71 <220> FEATURE:
W--> 71 <223> OTHER INFORMATION:
      71 <400> SEQUENCE: 4
      72 caggcaaaaga tgggcgtgat g
      75 <210> SEQ ID NO: 5
      76 <211> LENGTH: 21
      77 <212> TYPE: DNA
      78 <213> ORGANISM: Artificial Sequence
W--> 81 <220> FEATURE:
W--> 81 <223> OTHER INFORMATION:
      81 <400> SEQUENCE: 5
      82 caggcaaaaga tgggtgtgat g
      85 <210> SEQ ID NO: 6
      86 <211> LENGTH: 21
      87 <212> TYPE: DNA
      88 <213> ORGANISM: Artificial Sequence
W--> 91 <220> FEATURE:
W--> 91 <223> OTHER INFORMATION:
      91 <400> SEQUENCE: 6
      92 caggcaaaaga tgggagtgat g
      95 <210> SEQ ID NO: 7
      96 <211> LENGTH: 21
      97 <212> TYPE: DNA
      98 <213> ORGANISM: Artificial Sequence
W--> 101 <220> FEATURE:
W--> 101 <223> OTHER INFORMATION:
      101 <400> SEQUENCE: 7
      102 caggcaaaaga tgggggtgat g
      105 <210> SEQ ID NO: 8
      106 <211> LENGTH: 22
      107 <212> TYPE: DNA
      108 <213> ORGANISM: Artificial Sequence
W--> 111 <220> FEATURE:
W--> 111 <223> OTHER INFORMATION:
      111 <400> SEQUENCE: 8
      112 tgatggcacc aaggagaaaa ag
      115 <210> SEQ ID NO: 9
      116 <211> LENGTH: 22
      117 <212> TYPE: DNA
      118 <213> ORGANISM: Artificial Sequence
W--> 121 <220> FEATURE:
W--> 121 <223> OTHER INFORMATION:
      121 <400> SEQUENCE: 9
      122 tgatgacacc aaggagaaaa ag
      125 <210> SEQ ID NO: 10
      126 <211> LENGTH: 22
      127 <212> TYPE: DNA
      128 <213> ORGANISM: Artificial Sequence
W--> 131 <220> FEATURE:

```

21

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RAW SEQUENCE LISTING                      DATE: 12/12/2000  
 PATENT APPLICATION: US/09/727,030        TIME: 12:10:45  
 Input Set : A:\240240us.txt  
 Output Set: N:\CRF3\12122000\I727030.raw

```

W--> 131 <223> OTHER INFORMATION:
131 <400> SEQUENCE: 10
132 tgatgtcacc aagggagaaaa ag                22
135 <210> SEQ ID NO: 11
136 <211> LENGTH: 22
137 <212> TYPE: DNA
138 <213> ORGANISM: Artificial Sequence
W--> 141 <220> FEATURE:
W--> 141 <223> OTHER INFORMATION:
141 <400> SEQUENCE: 11
142 tgatgccacc aagggagaaaa ag                22
145 <210> SEQ ID NO: 12
146 <211> LENGTH: 22
147 <212> TYPE: DNA
148 <213> ORGANISM: Artificial Sequence
W--> 151 <220> FEATURE:
W--> 151 <223> OTHER INFORMATION:
151 <400> SEQUENCE: 12
152 tgatggcacc aagggagaaaa ag                22
155 <210> SEQ ID NO: 13
156 <211> LENGTH: 22
157 <212> TYPE: DNA
158 <213> ORGANISM: Artificial Sequence
W--> 161 <220> FEATURE:
W--> 161 <223> OTHER INFORMATION:
161 <400> SEQUENCE: 13
162 tgatggcacc aaggaagaaaa ag                22
165 <210> SEQ ID NO: 14
166 <211> LENGTH: 22
167 <212> TYPE: DNA
168 <213> ORGANISM: Artificial Sequence
W--> 171 <220> FEATURE:
W--> 171 <223> OTHER INFORMATION:
171 <400> SEQUENCE: 14
172 tgatggcacc aaggtagaaaa ag                22
175 <210> SEQ ID NO: 15
176 <211> LENGTH: 22
177 <212> TYPE: DNA
178 <213> ORGANISM: Artificial Sequence
W--> 181 <220> FEATURE:
W--> 181 <223> OTHER INFORMATION:
181 <400> SEQUENCE: 15
182 tgatggcacc aaggcagaaaa ag                22
185 <210> SEQ ID NO: 16
186 <211> LENGTH: 23
187 <212> TYPE: DNA
188 <213> ORGANISM: Artificial Sequence
W--> 191 <220> FEATURE:
W--> 191 <223> OTHER INFORMATION:

```

RAW SEQUENCE LISTING      DATE: 12/12/2000  
PATENT APPLICATION: US/09/727,030      TIME: 12:10:45

Input Set : A:\240240us.txt  
Output Set: N:\CRF3\12122000\I727030.raw

```
191 <400> SEQUENCE: 16
192 aaatttttgcc acctgcctc acg
195 <210> SEQ ID NO: 17
196 <211> LENGTH: 23
197 <212> TYPE: DNA
198 <213> ORGANISM: Artificial Sequence
W--> 201 <220> FEATURE:
W--> 201 <223> OTHER INFORMATION:
201 <400> SEQUENCE: 17
202 agtcccgag cgtgcagttc agt
205 <210> SEQ ID NO: 18
206 <211> LENGTH: 24
207 <212> TYPE: DNA
208 <213> ORGANISM: Artificial Sequence
W--> 211 <220> FEATURE:
W--> 211 <223> OTHER INFORMATION:
211 <400> SEQUENCE: 18
212 ttttttttga cacatgggat aacg
215 <210> SEQ ID NO: 19
216 <211> LENGTH: 24
217 <212> TYPE: DNA
218 <213> ORGANISM: Artificial Sequence
W--> 221 <220> FEATURE:
W--> 221 <223> OTHER INFORMATION:
221 <400> SEQUENCE: 19
222 ttttttttga cacatgggat aacg
225 <210> SEQ ID NO: 20
226 <211> LENGTH: 24
227 <212> TYPE: DNA
228 <213> ORGANISM: Artificial Sequence
W--> 232 <220> FEATURE:
W--> 232 <223> OTHER INFORMATION:
232 <400> SEQUENCE: 20
233 ttttttttga cacatgggat aacg
236 <210> SEQ ID NO: 21
237 <211> LENGTH: 24
238 <212> TYPE: DNA
239 <213> ORGANISM: Artificial Sequence
W--> 242 <220> FEATURE:
W--> 242 <223> OTHER INFORMATION:
242 <400> SEQUENCE: 21
243 ttttttttga cacatgggat aacg
246 <210> SEQ ID NO: 22
247 <211> LENGTH: 24
248 <212> TYPE: DNA
249 <213> ORGANISM: Artificial Sequence
W--> 252 <220> FEATURE:
W--> 252 <223> OTHER INFORMATION:
252 <400> SEQUENCE: 22
```

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/727,030 DATE: 12/12/2000  
 TIME: 12:10:45  
 Input Set : A:\240240us.txt  
 Output Set: N:\CRF3\12122000\I727030.raw

```

253 cttctctgtc tctgactctc cacc
256 <210> SEQ ID NO: 23
257 <211> LENGTH: 20
258 <212> TYPE: DNA
259 <213> ORGANISM: Artificial Sequence
W--> 262 <220> FEATURE:
W--> 262 <223> OTHER INFORMATION:
262 <400> SEQUENCE: 23
263 caaggtgagc agagggagac
266 <210> SEQ ID NO: 24
267 <211> LENGTH: 21
268 <212> TYPE: DNA
269 <213> ORGANISM: Artificial Sequence
W--> 272 <220> FEATURE:
W--> 272 <223> OTHER INFORMATION:
272 <400> SEQUENCE: 24
273 ttctgccatg attcctctct g
276 <210> SEQ ID NO: 25
277 <211> LENGTH: 21
278 <212> TYPE: DNA
279 <213> ORGANISM: Artificial Sequence
W--> 282 <220> FEATURE:
W--> 282 <223> OTHER INFORMATION:
282 <400> SEQUENCE: 25
283 ttctgccatg gttcctctct g
286 <210> SEQ ID NO: 26
287 <211> LENGTH: 21
288 <212> TYPE: DNA
289 <213> ORGANISM: Artificial Sequence
W--> 292 <220> FEATURE:
W--> 292 <223> OTHER INFORMATION:
292 <400> SEQUENCE: 26
293 ttctgccatg ttctctctct g
296 <210> SEQ ID NO: 27
297 <211> LENGTH: 21
298 <212> TYPE: DNA
299 <213> ORGANISM: Artificial Sequence
W--> 302 <220> FEATURE:
W--> 302 <223> OTHER INFORMATION:
302 <400> SEQUENCE: 27
303 ttctgccatg cttcctctct g
306 <210> SEQ ID NO: 28
307 <211> LENGTH: 25
308 <212> TYPE: DNA
309 <213> ORGANISM: Artificial Sequence
W--> 312 <220> FEATURE:
W--> 312 <223> OTHER INFORMATION:
312 <400> SEQUENCE: 28
313 gttagaagga aacagaccac agacc

```

FYI:

The types of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

VERIFICATION SUMMARY                      DATE: 12/12/2000  
PATENT APPLICATION: US/09/727,030        TIME: 12:10:46

Input Set : A:\240240us.txt  
Output Set: N:\CRF3\12122000\I727030.raw

L:20 M:270 C: Current Application Number differs, Replaced Current Application No  
L:20 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:39 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:39 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:51 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:51 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:61 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:61 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:71 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:71 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:81 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:81 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:91 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:91 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:101 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:101 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:111 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:111 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:121 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:121 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:131 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:131 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:141 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:141 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:151 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:151 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:161 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:161 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
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L:171 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:181 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:181 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:191 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:191 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:201 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:201 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:211 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:211 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:221 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:221 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:232 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:232 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:242 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:242 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:252 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:252 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:  
L:262 M:258 W: Mandatory Feature missing, <220> FEATURE:  
L:262 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:



VERIFICATION SUMMARY

PATENT APPLICATION: US/09/727,030

DATE: 12/12/2000

TIME: 12:10:46

Input Set : A:\240240us.txt

Output Set: N:\CRF3\12122000\I727030.raw

L:272 M:258 W: Mandatory Feature missing, <220> FEATURE:

L:272 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION:

L:282 M:258 W: Mandatory Feature missing, <220> FEATURE:

L:282 M:258 W: Mandatory Feature missing, <223> OTHER INFORMATION: